

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claim in the application.

Listing of the Claims:

1-20. (Canceled)

21. (Currently Amended) A method of providing access to a selected portion of data that is periodically transmitted via a plurality of channels by a broadcaster in a broadcast system, said method comprising:

receiving, by a receiver in said broadcast system, a request from a requester, wherein said request requests selection that identifies a first selected data portion in a plurality of data portions that are periodically transmitted by said broadcaster in said broadcast system via a first channel;

providing instantiating a first carousel object for said first selected data portion selection, wherein said first carousel object is associated with a carousel class that can encapsulate data periodically transmitted by the broadcaster to abstract said first channel used to broadcast said first selected data portion, thereby allowing data to be accessed via said first carousel object without requiring said requestor to access said first selected data portion via said first channel used by the broadcaster to broadcast said first selected data portion;

initiating a request to receive receiving said first selected data portion via said first carousel object in response to said instantiating of said first carousel object;

determining whether said first selected data portion is available in a storage used to store said periodically transmitted data in response to said instantiating of said first carousel object;

acquiring said first selected data portion from said storage in response to said initiating of said request when said determining determines that said first selected data portion is available in said storage;

providing access to said first selected data portion stored in said storage via said first carousel object ~~in said broadcast system~~ when said determining determines that said first selected data portion is available in said storage, thereby allowing said first

selected data portion to be accessed by said requester without said requester having to wait for the next transmission of said first selected data portion on said first channel;

storing said first selected data portion in said storage, in response to said instantiating of said first carousel object, when said determining determines that said first selected data portion is not available in said storage;

sending, to said requester, a notification which indicates said first selected data portion can be accessed via said first carousel object, when said first selected data portion is stored in said storage device and becomes available for access via said first carousel object; and

providing access to said first selected data portion stored in said storage via said first carousel object after said notification is sent, thereby allowing said requester to access said first selected data portion via said first carousel object when it becomes available and without having to listen to said first channel.

22. (Previously Presented) A method as recited in claim 21, wherein said method further comprises:

receiving a request for updates of said first data portion;

determining whether said first data portion has been updated; and

sending an update notification when said first data portion has been updated.

23. (Previously Presented) A method as recited in claim 22, wherein said method further comprises:

receiving a subscription request for updates to said first data portion; and

determining whether said data portion has been updated; and

sending an update notification when said determining determines that said first data portion has been updated.

24. (Previously Presented) A method as recited in claim 23, wherein said method further comprises:

receiving a request to cancel said subscription request.

25. (Previously Presented) A method as recited in claim 21,

wherein said access to said first data portion is provided by creating a file system that represents data transmitted by said broadcaster, and

wherein a set of input and output operations are provided for said file system.

26. (Previously Presented) A method as recited in claim 21, wherein said access to said first data portion is provided by creating an object file that represents the data transmitted by said broadcaster.

27. (Previously Presented) A method as recited in claim 26, wherein said data object is implemented as a carousel file.

28. (Previously Presented) A method as recited in claim 27, wherein said carousel file is implemented as a Java™ carousel class that is compliant with Java™ Programming language.

29. (Previously Presented) A method as recited in claim 28, wherein said method further comprises:

Instantiating a carousel file object;
Initiating a read operation on the carousel file object; and
waiting until the read operation successfully completes.

30. (Previously Presented) A method as recited in claim 21, wherein said access is provided by a Java TV™ compliant Application Programming Language (API).

31. (Currently Amended) A receiver suitable for accessing selected portions of data that is periodically transmitted by a broadcaster in a broadcasting system, wherein said receiver operates to:

receive, by a receiver in said broadcast system, a request from a requester, wherein said request requests a first selected data portion in a plurality of data portions that are periodically transmitted by said broadcaster in said broadcast system via a first channel;

instantiate a first carousel object for said first selected data portion, wherein said first carousel object is associated with a carousel class that can encapsulate data periodically transmitted by the broadcaster to abstract said first channel used to broadcast said first selected data portion, thereby allowing data to be accessed via said first carousel object without requiring said requestor to access said first selected data

portion via said first channel used by the broadcaster to broadcast said first selected data portion;

initiate a request to receive said first selected data portion via said first carousel object in response to said instantiating of said first carousel object;

determine whether said first selected data portion is available in a storage used to store said periodically transmitted data in response to said instantiating of said first carousel object;

acquire said first selected data portion from said storage in response to said initiating of said request when said determining determines that said first selected data portion is available in said storage;

provide access to said first selected data portion stored in said storage via said first carousel object when said determining determines that said first selected data portion is available in said storage, thereby allowing said first selected data portion to be accessed by said requester without said requestor having to wait for the next transmission of said first selected data portion on said first channel;

store said first selected data portion in said storage, in response to said instantiating of said first carousel object, when said determining determines that said first selected data portion is not available in said storage;

send, to said requestor, a notification which indicates said first selected data portion can be accessed via said first carousel object, when said first selected data portion is stored in said storage device and becomes available for access via said first carousel object; and

provide access to said first selected data portion stored in said storage via said first carousel object after said notification is sent, thereby allowing said requester to access said first selected data portion via said first carousel object when it becomes available and without having to listen to said first channel.

~~receive a request for a first data portion that has been selected from a plurality of data portions that are periodically transmitted by said broadcaster in said broadcast system;~~

~~providing a first carousel object for said selection, wherein said first carousel object is associated with a carousel class that can encapsulate data periodically transmitted by the broadcaster;~~

~~receiving said first data portion via said first carousel object;~~

~~determine whether said first data portion is available in a storage used to store said periodically transmitted data;~~

~~provide access to said first data portion in said broadcast system when said determining determines that said first data portion is available in said storage;~~

~~store said first data portion in said storage when said determining determines that said first data portion is not available in said storage;~~

~~send a notification when said first data portion is stored in said storage device and becomes available for access; and~~

~~provide access to said first data portion via said first carousel object when said notification is sent.~~

32. (Previously Presented) A receiver as recited in claim 31, wherein said receiver further:

receives a request for updates of said first data portion;

determines whether said first data portion has been updated; and

sends an update notification when said first data portion has been updated.

33. (Previously Presented) A receiver as recited in claim 31, wherein said receiver further:

receives a subscription request for receiving updates to said first data portion;
and

determines whether said first data portion has been updated; and

sends an update notification when said determining determines that said data portion has been updated.

34. (Previously Presented) A receiver as recited in claim 33,
wherein said access to said first data portion is provided by creating a file system that represents the data transmitted by said broadcaster, and
wherein a set of input and output operations are provided for said file system.

35. (Previously Presented) A receiver as recited in claim 33, wherein said access to said first data portion is provided by creating an object that represents the data transmitted by said broadcaster.

36. (Previously Presented) A receiver as recited in claim 35, wherein said data object is implemented as a carousel file.

37. (Previously Presented) A receiver as recited in claim 33, wherein said carousel file is implemented as a Java™ carousel class that is compliant with Java™ Programming language.

38. (Currently Amended) A computer readable medium including computer program code for providing access to data that is periodically transmitted by a broadcaster in a broadcast system, said computer readable media comprising:

computer program code for receiving, by a receiver in said broadcast system, a request from a requester, wherein said request requests a first selected data portion in a plurality of data portions that are periodically transmitted by said broadcaster in said broadcast system via a first channel;

computer program code for instantiating a first carousel object for said first selected data portion, wherein said first carousel object is associated with a carousel class that can encapsulate data periodically transmitted by the broadcaster to abstract said first channel used to broadcast said first selected data portion, thereby allowing data to be accessed via said first carousel object without requiring said requestor to access said first selected data portion via said first channel used by the broadcaster to broadcast said first selected data portion;

computer program code for initiating a request to receive said first selected data portion via said first carousel object in response to said instantiating of said first carousel object;

computer program code for determining whether said first selected data portion is available in a storage used to store said periodically transmitted data in response to said instantiating of said first carousel object;

computer program code for acquiring said first selected data portion from said storage in response to said initiating of said request when said determining determines that said first selected data portion is available in said storage;

computer program code for providing access to said first selected data portion stored in said storage via said first carousel object when said determining determines that said first selected data portion is available in said storage, thereby allowing said first selected data portion to be accessed by said requester without said requestor

having to wait for the next transmission of said first selected data portion on said first channel;

computer program code for storing said first selected data portion in said storage, in response to said instantiating of said first carousel object, when said determining determines that said first selected data portion is not available in said storage;

computer program code for sending, to said requestor, a notification which indicates said first selected data portion can be accessed via said first carousel object, when said first selected data portion is stored in said storage device and becomes available for access via said first carousel object; and

computer program code for providing access to said first selected data portion stored in said storage via said first carousel object after said notification is sent, thereby allowing said requester to access said first selected data portion via said first carousel object when it becomes available and without having to listen to said first channel.

~~computer program code for receiving, by a receiver in said broadcast system, a request for a first data portion that is periodically transmitted by said broadcaster in said broadcast system;~~

~~computer program code for providing a first carousel object for said selection, wherein said first carousel object is associated with a carousel class that can encapsulate data periodically transmitted by the broadcaster;~~

~~computer program code for receiving said first data portion via said first carousel object;~~

~~computer program code for determining whether said first data portion is available in a storage used to store said periodically transmitted data;~~

~~computer program code for providing access to said first data portion in said broadcast system when said determining determines that said first data portion is available in said storage;~~

~~computer program code for storing said first data portion in said storage when said determining determines that said first data portion is not available in said storage;~~

~~computer program code for sending a notification when said first data portion is stored in said storage device and becomes available for access; and~~

~~computer program code for providing access via said first carousel object to said first data portion after said notification is sent.~~

39. (Previously Presented) A computer readable medium as recited in claim 38, wherein said access to said first data portion is provided by creating an object that represents data transmitted by said broadcaster.

40. (Previously Presented) A computer readable medium as recited in claim 39, wherein said data object is implemented as a carousel file.

41. (Previously Presented) A computer readable medium as recited in claim 39, wherein said carousel file is implemented as a Java™ carousel class that is compliant with Java™ Programming language.